

## Fire Prevention Bureau

Information Bulletin

# MOBILE FOOD PREPARATION VEHICLE REQUIREMENTS

**Definition**: Vehicles that contain cooking equipment that produce smoke or grease-laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.

<u>General</u>. Mobile food preparation vehicles that are equipped with appliances that produce smoke or grease-laden vapors shall comply with this section to possibly include food trailers and food carts.

<u>Inspection Frequency</u>. An annual visual inspection shall be conducted and required paperwork shall be provided at time of inspection to the Greenville City Fire Marshal's Office.

<u>Mobile Cooking Operations</u>. Mobile cooking operations shall be separated from buildings, structures, canopies, tents, combustible materials, vehicles, and other cooking operations by a minimum of 10 feet. Exhaust shall be directed away from openings, air intakes and away from any means of egress.

**Permit required.** Permits issued by Greenville City Business Office.

**Exhaust hood.** Cooking equipment that produces grease-laden vapors shall be provided with a kitchen exhaust hood in accordance with Section 607.

**Open Flame.** Charcoal burners and other open flame cooking devices may be required to obtain a separate permit from the Fire Marshal's office. (i.e. wood burning stoves, smokers, etc.)

<u>Fire protection for cooking equipment</u>. Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.12.

**Fire extinguisher.** Portable fire extinguishers shall be provided in accordance with Section 906.4.

**Appliance connection to fuel supply piping.** Gas cooking appliances shall be secured in place and connected to fuel-supply piping with an appliance connector complying with ANSI Z21.69/CSA 6.16. The connector installation shall be configured in accordance with the manufacturer's installation instructions. Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturers' instructions.

<u>Cooking oil storage containers</u>. Cooking oil storage containers within mobile food preparation vehicles shall have a maximum aggregate volume not more than 120 gallons (454 L), and shall be stored in such a way as to not be toppled or damaged during transport.

Cooking oil storage tanks. Cooking oil storage tanks within mobile food preparation vehicles shall comply as follows.

- **Metallic storage tanks.** Metallic cooking oil storage tanks shall be *listed* in accordance with UL 80 or UL 142, and shall be installed in accordance with the tank manufacturer's instructions.
- **Nonmetallic storage tanks.** Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer's instructions and shall comply with both of the following:
  - o Tanks shall be *listed* for use with cooking oil, including maximum temperature to which the tank will be exposed during use.
  - o Tank capacity shall not exceed 200 gallons (757 L) per tank.

<u>Cooking oil storage system components</u>. Metallic and nonmetallic cooking oil storage system components shall include, but are not limited to, piping, connections, fittings, valves, tubing, hose, pumps, vents and other related components used for the transfer of cooking oil

**<u>Design criteria.</u>** The design, fabrication and assembly of system components shall be suitable for the working pressures, temperatures, and structural stresses to be encountered by the components.

**Tank venting.** Normal and emergency venting shall be provided for cooking oil storage tanks.

<u>Normal vents</u>. Normal vents shall be located above the maximum normal liquid line, and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents are not required to vent to the exterior.

<u>Emergency vents</u>. Emergency relief vents shall be located above the maximum normal liquid line, and shall be in the form of a device or devices that will relieve excessive internal pressure caused by an exposure fire. For non-metallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents are not required to discharge to the exterior.



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**LP-gas systems.** Where LP-gas systems provide fuel for cooking appliances, such systems shall comply with Chapter 61 and the following:

- **Maximum aggregate volume.** The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds (91 kg) propane capacity.
- **Protection of container.** LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement.
- **LP-gas container construction.** LP-gas containers shall be manufactured in compliance with the requirements of NFPA 58.
- Protection of system piping. LP-gas system piping, including valves and fittings, shall be adequately
  protected to prevent tampering, impact damage, and damage from vibration.
- **LP-gas alarms.** A *listed* LP-gas alarm shall be installed within the vehicle in the vicinity of LP-gas system components in accordance with the manufacturer's instructions.

**CNG systems.** Where CNG systems provide fuel for cooking appliances, such systems shall comply as follows:

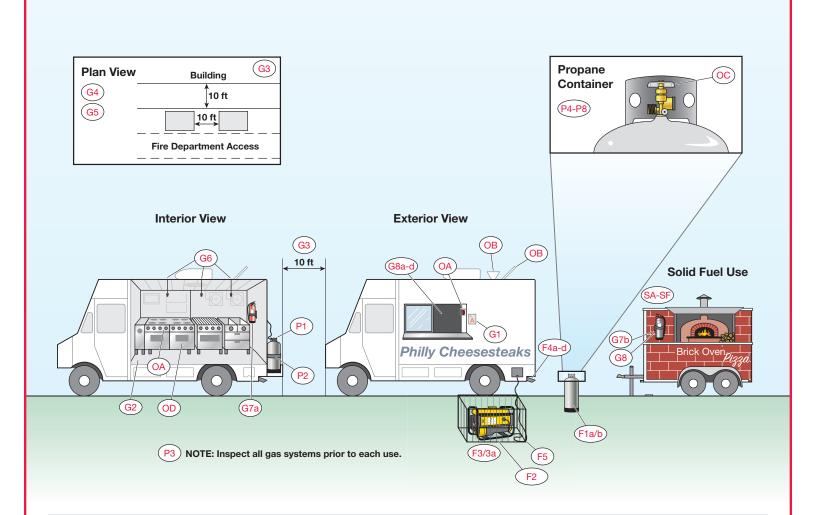
- **CNG containers supplying only cooking fuel.** CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with:
- **Maximum aggregate volume.** The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds (590 kg) water capacity.
- **Protection of container.** CNG containers shall be securely mounted and restrained to prevent movement. Containers shall not be installed in locations subject to a direct vehicle impact.
- **CNG container construction.** CNG containers shall be an NGV-2 cylinder.
- CNG containers supplying transportation and cooking fuel. Where CNG containers and systems are used to supply fuel for cooking purposes in addition to being used for transportation fuel, the installation shall be in accordance with NFPA 52.
- **Protection of system piping.** CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage and damage from vibration.
- **Methane alarms.** A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer's instructions.

Maintenance. Maintenance of systems on mobile food preparation vehicles shall be as follows:

- **Exhaust system.** The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Section 607.3.
- **Fire protection systems and devices.** Fire protection systems and devices shall be maintained in accordance with Section 901.6.
- Fuel gas systems. LP-gas containers installed on the vehicle and fuel-gas piping systems shall be inspected annually by an approved inspection agency or a company that is registered with the U.S. Department of Transportation to requalify LP-gas cylinders, to ensure that system components are free from damage, suitable for the intended service and not subject to leaking. CNG containers shall be inspected every 3 years in a qualified service facility. CNG containers shall not be used past their expiration date as listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.

Please contact the Greenville City Fire Department – Fire Prevention Bureau at (864)-467-4450 with any questions or for additional information.

# FOOD TRUCK SAFETY



NFPA code references are provided at the end of each item. The red keys correspond to the NFPA food truck safety diagram. For more detailed information, see NFPA 1 and Chapter 17 in NFPA 96.

### **General Safety Checklist**

- Obtain license or permits from the local authorities. [1:1.12.8(a)] G1
- $\Box$  Ensure there is no public seating within the mobile food truck. [1:50.8.3.2] G2
- Check that there is a clearance of at least 10 ft away from buildings, structures, vehicles, and any combustible materials. [96:17.2] G3
- □ Verify fire department vehicular access is provided for fire lanes and access roads. [1:18.2.4] G4
- ☐ Ensure clearance is provided for the fire department to access fire hydrants and access fire department connections. [1:13.1.4; 1:13.1.5] G5
- ☐ Check that appliances using combustible media are protected by an approved fire extinguishing system. [96:10.1.2] G6

- ☐ Verify portable fire extinguishers have been selected and installed in kitchen cooking areas in accordance with NFPA 10. [96:10.9] G7a
- ☐ Where cooking appliances that use solid fuel, such as charcoal or wood, produce grease-laden vapors, make sure the appliances are protected by listed fire-extinguishing equipment. [96:15.7.1] G7b
- ☐ Ensure that workers are trained in the following: [96:17.10]: G8
  - ☐ Proper use of portable fire extinguishers and extinguishing systems
    [96:17.10.1(1)] G8a
  - □ Proper method of shutting off fuel sources [96:17.10.1(2)] G8b
  - ☐ Proper procedure for notifying the local fire department [96:17.10.1(1)] G8c
  - ☐ Proper procedure for how to perform simple leak test on gas connections [96:17.10.1(5)] G8d



# FOOD TRUCK SAFETY CONTINUED

#### **Fuel & Power Sources Checklist**

- □ Verify that fuel tanks are filled to the capacity needed for uninterrupted operation during normal operating hours. [1:10.14.11.1 for carnivals only] F1a
- ☐ Ensure that refueling is conducted only during non-operating hours.

  [96:17.8.3] F1b
- Check that any engine-driven source of power is separated from the public by barriers, such as physical guards, fencing, or enclosures. [96:17.5.2.2] F2
- Ensure that any engine-driven source of power is shut down prior to refueling from a portable container. [1:10.15.4] F3
- ☐ Check that surfaces of engine-driven source of power are cool to the touch prior to refueling from a portable container. F3a
- Make sure that exhaust from engine-driven source of power complies with the following: F4
  - □ At least 12 ft in all directions from openings and air intakes [96:17.5.2.3(1)] F4a
  - ☐ At least 12 ft from every means of egress [96:B.13] F4b
  - □ Directed away from all buildings [96:17.5.2.3(2)] F4c
  - ☐ Directed away from all other cooking vehicles and operations [96:17.5.2.3(3)] F4d
- □ Ensure that all electrical appliances, fixtures, equipment, and wiring complies with the NFPA 70® [96:17.8.1] F5

### **Propane System Integrity Checklist**

- ☐ Check that the main shutoff valve on all gas containers is readily accessible. [58:6.26.4.1(3)] P1
- ☐ Ensure that portable gas containers are in the upright position and secured to prevent tipping over. [58:6.26.3.4] P2
- ☐ Inspect gas systems prior to each use. [96:17.7.2.3] P3
- □ Perform leak testing on all new gas connections of the gas system. [58:6.16;
   58:6.17] P4
- ☐ Perform leak testing on all gas connections affected by replacement of an exchangeable container. [58:6.16; 58:6.17] P5
- □ Document leak testing and make documentation available for review by the authorized official. [58:6.26.5.1(M)] P6
- □ Ensure that on gas system piping, a flexible connector is installed between the regulator outlet and the fixed piping system. [58:6.26.5.1(B)] P7
- ☐ Where a gas detection system is installed, ensure that it is tested monthly. [96:17.7.2.2] P8

## **Operational Safety Checklist**

☐ Do not leave cooking equipment unattended while it is still hot. (This is the leading cause of home structure fires and home fire injuries.) ○A

- Operate cooking equipment only when all windows, service hatches, and ventilation sources are fully opened. [96:12.1.1] OB
- ☐ Close gas supply piping valves and gas container valves when equipment is not in use. [58:6.26.8.3] OC
- ☐ Keep cooking equipment, including the cooking ventilation system, clean by regularly removing grease. [96:12.4] OD

# Solid Fuel Safety Checklist (Where Wood, Charcoal, Or Other Solid Fuel Is Used)

- ☐ Fuel is not stored above any heat-producing appliance or vent. [96:15.9.2.2] SA
- ☐ Fuel is not stored closer than 3 ft to any cooking appliance. [96:15.9.2.2] SB
- ☐ Fuel is not stored near any combustible flammable liquids, ignition sources, chemicals, and food supplies and packaged goods. [96:15.9.2.7] SC
- ☐ Fuel is not stored in the path of the ash removal or near removed ashes. [96:15.9.2.4] SD
- □ Ash, cinders, and other fire debris should be removed from the firebox at regular intervals and at least once a day. [96:15.9.3.6.1] SE
- □ Removed ashes, cinders, and other removed fire debris should be placed in a closed, metal container. [96:15.9.3.8.1] SF

### Learn More

- Get free digital access to NFPA codes and standards at: nfpa.org/docinfo
- ► Read the latest news and updates at: nfpa.org/foodtrucksafety
- ► Review the following and other NFPA resources at: nfpa.org
  - NFPA 1, Fire Code, 2021 Edition
  - NFPA 1 Fire Code Handbook, 2021 Edition
  - NFPA 10, Standard for Portable Fire Extinguishers, 2018
     Edition
  - NFPA 58, Liquefied Petroleum Gas Code, 2020 Edition
  - LP-Gas Code Handbook, 2020 Edition
  - NFPA 70°, National Electrical Code®, 2020 Edition
- National Electrical Code® Handbook, 2020 Edition
- NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2021 Edition
- NFPA 96: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations Handbook, 2017 Edition

